DEFENSE THREAT REDUCTION AGENCY (DTRA)

STATEMENT OF OBJECTIVES (SOO) FOR AGENCY ADVISORY & ASSITANCE SERVICES (A&AS)

1.0 BACKGROUND. DTRA's mission is to safeguard America's interests from weapons of mass destruction (chemical, biological, radiological, nuclear and high explosives) by controlling and reducing the threat and providing quality tools and services for the warfighter. The objective of this solicitation is to acquire technical, business, and operational advisory and assistance services for DTRA and its operational elements, in support of research, planning, designing, developing, implementing, integrating, testing, applying, and evaluating emerging and mature technologies and developing and transitioning capabilities to DTRA customers.

- 2.0 OVERALL PROGRAM OBJECTIVES. Central to this contracting effort are the means to:
- **2.1** Provide a contractual tool to procure Advisory and Assistance Services (A&AS) which optimizes technical support to DTRA's Directorates.
 - 2.2 React quickly to changing or new requirements.
 - **2.3** Expedite contract changes.
 - 2.4 Minimize Organization Conflict of Interest issues

3.0 CONTRACT OBJECTIVES. The objective of this contract is to provide a contracting tool that DTRA can use to procure needed services. The services sought under this contract will:

- Support/improve organization policy development
- Support/improve decision-making
- Support/improve management & administration
- Support/improve project management & administration
- Improve effectiveness of management processes or procedures
- Provide engineering and technical support services

3.1 Supported Mission Areas. The services shall support various DTRA Directorates whose mission are as follows:

<u>Combat Support:</u> This mission supports the essential Weapons of mass Destruction (WMD) response capabilities, functions, activities and tasks necessary to sustain all elements of forces in-theater at all levels of threat and to assist in civil support. This area includes but is not limited to the development of advanced nuclear weapons, strategic and tactical employment concepts consistent with evolving national policy; enhanced security and surety systems for positive control, storage, transport, maintenance and operation of nuclear weapons; improved WMD response capabilities; assessments of the threat from improvised nuclear devices to include radiological dispersion devices; and WMD forensics capabilities.

<u>Technology Development:</u> Conducts research and development in order to develop unconventional and conventional means to functionally defeat WMD facilities and delivery systems, and hard and deeply buried targets; develops models of terrorist behavior to anticipate terrorist actions; improves detection and characterization of chemical, biological, radiological and nuclear threats; develops nuclear weapons effects lethality and survivability models, tools and devices; and, develops models to assess the significance of simulation versus simulators and identify the limitations of each.

<u>Threat Control:</u> The objective of this mission is to shape and manage technology security. This includes but is not limited to developing non-intrusive detection mechanisms for WMD; integrating surveillance, detection and characterization of threats; developing super-networks which can interconnect multiple databases and perform detailed analysis of large masses of data; assessing the impact of future arms control treaty policy and implementation; and, innovating advanced technologies for verification and compliance monitoring.

<u>Threat Reduction:</u> This mission assists eligible states of the former Soviet Union to reduce the threat of WMD device proliferation. This includes but is not limited to improving management systems for enhanced monitoring and accountability of high value items; developing enhanced security systems for positive control of weapons and weapons by-products; assessing policies and strategies for expanding current agreements; and, developing structural protection, response, and repair tools.

<u>Support Functions:</u> The objective of this area is to develop innovative management practices to streamline and make more effective the Agency's resource, business, information, and security and intelligence management activities. This area includes but is not limited to: personnel, budget and logistics management; acquisition, administration, process improvement, and public and congressional outreach; identification of future concepts to leverage information technology and human initiative; and, develop requirements and perform security, intelligence and counterintelligence functions to provide appropriate protection for information and government property and prevent hostile acts that may impact our personnel.

3.2 Supported Functions and Programs: Examples of some of the functions and programs to be supported include:

- Research Development Technology and Evaluation Program Management and Project integration support;
- Program planning, coordination and general support;
- Strategic planning, programs, cost benefit analysis and process improvement
- Capability to apply structural business methods to large, complex high-risk programs
- Accelerating delivery of Special Operational Forces Counterproliferation technologies;
- Developing special weapons and planning tools to support Combatant Commands' needs for rapid, responsive systems to reduce Weapons of Mass Destruction (WMD) threats;
- Providing attack planning and assessing post-attack effects of weapons on tunnel infrastructures;
- Providing real-time operational support using DTRA's suite of consequence assessment tools for protection and security;
- Nuclear Stockpile Support in the area of technology development
- Nuclear Stockpile Support operations
- Homeland Defense Technology and Operational Support
- Support military and civil defense (combating terrorism and homeland defense) against and response to WMD use;
- Operations Center Support--Assessment and Analysis Reachback Support;
- Threat Reduction Advisory Committee (TRAC) support;
- Arms control technology and operating concept support;
- Information technology strategic and enterprise architecture (EA)planning and oversight;
- Information Operations support in the areas of trend analysis, configuration management, assessment, and technical integration;
- Information Assurance (IA) management, oversight, planning, audit functions;
- Global Information Grid (GIG) and related programmatic elements program planning and oversight;
- Knowledge Management (KM) audits, planning and oversight;
- Blast mitigation technology support;
- Chemical Biological Defense support (non-medical/medical/technology transition, to include related operating concepts
- Cultural and related social science modeling support
- DTRA Information Analysis Center Support in the areas of information technology, information and knowledge management, and records management;
- Environmental, Safety, and Health support;
- Congressional, Financial/Budget, Human Resources Support;

- In-depth scientific expertise at the advanced degree level in chemical and biological science including microbiology, toxicology, immunology, public health, biological and chemical sensing, identification and characterization.
- Identification of technology shortfalls in detecting, mitigating, re-mediating and protecting from the effects of chemical and biological agents including toxic industrial chemicals and materials.
- Analysis and evaluation of emerging technologies and related WMD operating concepts to address DTRA mission requirement to support Combatant Commands.
- Identification and evaluation of alternative research approaches and investment strategies
- Performance validation and standards
- Technology readiness and transition
- Sufficiently broad 'risk assessment' capability
- Visiting Scientists Program
- Ability to research and Assess previously unidentified deficiencies in capabilities, process/procedures, and expertise for forward looking studies.
- Force Protection
- Survivability Assessment or Analysis
- European Theater Nuclear Forces Improvement Program EUCOM, NATO and SHAPE.

3.3 Supported Expertise and Capabilities: Examples of the highly technical and complex expertise and capabilities required are:

- Application of accepted business management and analysis methods to large, complex high-risk programs
- DoD procurement process and methods for expedited acquisition and delivery of products and services
- Homeland Defense-related technologies
- Risk Assessment methodologies
- In-depth scientific expertise at the advanced degree level in chemical and biological science including microbiology, toxicology, immunology, public health, biological and chemical sensing, identification and characterization.
- Identification of technology shortfalls in detecting, mitigating, re-mediating and protecting from the effects of chemical. biological and radiological agents including toxic industrial chemicals and materials.
- Information technology strategic and architecture planning;
- · Blast mitigation technologies;
- Performance validation and standards
- Technology readiness and transition
- Physics (including nuclear, atmospherics, blast, shock, mechanics, solid-state, and related fields), chemistry, biology, microbiology, physiology, pharmacology, toxicology and other physical and medical sciences pertinent to characterizing, mitigating and defeating the effects of weapons of mass destruction;
- Electrical, mechanical, civil, and other engineering sciences pertinent to characterizing, mitigating and defeating the effects of weapons of mass destruction